UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,196	12/23/2005	Reimo Tetzner	82497	8066
23685 KRIFGSMAN	7590 11/15/2007 <b>&amp; KRIEGSMAN</b>		EXAMINER WOOLWINE, SAMUEL C	
30 TURNPIKI	E ROAD, SUITE 9			
SOUTHBORG	OUGH, MA 01772		ART UNIT	PAPER NUMBER
			1637	*!
			MAIL DATE	DELIVERY MODE
			11/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/562,196	TETZNER ET AL.	
Office Action Summary	Examiner	Art Unit	
•	Samuel Woolwine	1637	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).	
Status			
1) ☐ Responsive to communication(s) filed on  2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro		
Disposition of Claims		,	
4)  Claim(s) 1-25 is/are pending in the application.  4a) Of the above claim(s) is/are withdrav  5)  Claim(s) is/are allowed.  6)  Claim(s) is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) 1-25 are subject to restriction and/or expressions.	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original transfer of the original transfer of the first sheet of the correction of the original transfer of the first sheet of the correction of the original transfer of the correction of the original transfer of the correction of the correction of the original transfer of the correction of the	epted or b) objected to by the lidrawing(s) be held in abeyance. See ion is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive i (PCT Rule 17.2(a)).	on No ed in this National Stage	
See the attached detailed Office action for a list	or the certified copies flot receive	a.	
	,		
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	

Art Unit: 1637

## **DETAILED ACTION**

## Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-24, drawn to methods for analyzing methylation status of nucleic acids.

Group II, claim(s) 25, drawn to a kit comprising nucleic acid primers.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: at least claim 1 is anticipated by Olek et al (US 2003/0082600). Olek taught a method for the detection of cytosine methylation in a DNA sample characterized in that the following steps are conducted:

a genomic DNA sample, which comprises the DNA to be investigated as well as background DNA is treated with bisulfite in such a way that all of the unmethylated cytosine bases are converted to uracil, while the 5-methylcytosine bases remain unchanged (paragraphs [0024] and [0029])

the bisulfite treated DNA sample is amplified with the use of at least 2 primer oligonucleotides as well as a polymerase, wherein the DNA to be investigated is preferred over the background DNA as the template (paragraph [0025])

and the amplification is conducted in the presence of at least one additional oligonucleotide or a PNA oligomer, which binds to a 5'-CG-3' dinucleotide or a 5'-TG-3' dinucleotide or a 5'-CA-3'-dinucleotide, whereby the other oligonucleotide or PNA oligomer preferably binds to the background DNA and adversely affects its amplification (paragraph [0030])

and the methylation status in the DNA to be investigated is concluded from the presence and/or the amount of the amplified products and/or from the analysis of additional positions (paragraph [0026]).

Art Unit: 1637

Because claim 1 is taught in the prior art, there can be no special technical feature shared by independent claims 1 and 25.

## Further Restriction Requirement Applicable to All Groups

Additionally, each group named above is subject to a further restriction. This application contains claims directed to one or more SEQ ID NOS. Applicant is required to select one SEQ ID NO for a forward primer, one SEQ ID NO for a reverse primer, and one SEQ ID NO for a blocker, to which all claims will be restricted. The SEQ ID NOS recited in claims 4, 5 and 25 have in common the fact that they may be used in the investigation of the GSTP1 gene. However, Olek also teaches primers to use in the investigation of the GSTP1 gene (see Examples 2 and 3, pages 11-12). Therefore, there is no special technical feature over the prior art that is shared among the recited SEQ ID NOS.

Due to the number of SEQ ID NOS and the number of possible combinations from which a single election must be made, a written requirement for restriction is being sent in lieu of a telephone call to allow Applicant sufficient time to consider the election and the cited prior art (MPEP 812.01).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a

Application/Control Number: 10/562,196

Art Unit: 1637

matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1637

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel Woolwine whose telephone number is (571) 272-1144. The examiner can normally be reached on Mon-Fri 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SCW

/Young J. Kim/
Primary Examiner
Art Unit 1637
Technology Center 1600